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ABSTRACT

This handbook is a guide to the "Test Development Notebook" of the System for Pupil and Program Evaluation and Development (SPPED). It describes the contents and organization of the notebook, suggests various uses of the exercises, provides sample test designs, outlines test production procedures, and offers guidelines for score interpretation. The notebook is a collection of 1,725 multiple-choice cloze (MCC) exercises designed to measure literal comprehension. Four types of material are represented in the "Test Development Notebook": (1) textbooks in reading/literature, language arts, social studies, sciences, and mathematics; (2) articles and editorials from newspapers and news magazines; (3) consumer materials, such as instructions, catalogs, or advertisements; and (4) reference materials, such as test instructions, encyclopedias, and children's magazines. While the initial use of the MCC exercises has produced evidence for their reliability and validity, their ultimate utility and worth will be established only when they have had further trial in a variety of school settings. (Author/PN)

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FORM 86

TEST DEVELOPMENT NOTEBOOK

Multiple-Choice Cloze Exercises: Handbook

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Revised 1977

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
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Albany, New York 12234

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TEST DEVELOPMENT NOTEBOOK

Multiple-Choice Cloze Exercises

Handbook

For use with SPPED Form 81, Test Development Notebook: Multiple-Choice Cloze Exercises, Revised 1977.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
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Albany, New York 12234

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PREFACE

This Handbook is a guide to the Test Development Notebook, Multiple-Choice Cloze Exercises, SPPED Form 81. It describes the contents and organization of the Notebook, suggests various uses of the exercises, provides sample test designs, outlines test production procedures, and offers guidelines for score interpretation.

The Multiple-Choice Cloze (MCC) exercises are an innovative approach to the measurement of literal comprehension in reading in grades 1 through 12. While the initial use of the MCC exercises has produced evidence for their reliability and validity, their ultimate utility and worth will be established only when they have had further trial in a variety of school settings. With this release of the Test Development Notebook (TDN), school districts are invited to try the MCC exercises on an experimental basis, to use them in conjunction with their customary measures of reading comprehension, and to provide the State Education Department with the feedback necessary for their further refinement.

The release of the Test Development Notebook calls for recognition of those who have contributed to its production. Robert P. O'Reilly, formerly Chief of the Bureau of School and Cultural Research and now Director of Research and Evaluation, Montgomery County Schools, Maryland, originated the TDN project and directed it until assuming his new post in July of 1976. Jean Corigliano, Joan Heffler, Shelly Sternbach, and Susan Weiner, Consultants, were largely responsible for construction of the MCC exercises designed by Mr. O'Reilly and helped in the initial preparation of training and other user materials for the TDN. Ruth Salter and Steven J. Kidder, Associates in Education Research, R. T. Schuder, Ronald Streeter, and Gerlach van Gendt, Assistants in Education Research, and Paul Hayford, Consultant, conducted various research and analytic studies for the TDN and brought the MCC exercises and the supplementary user materials to their present state of completion. Kathleen Mattice, Vicki Noble, Nancy Wait, and Kim DeLoria provided the secretarial and clerical services so essential to the TDN project. Throughout the project the Bureau of School and Cultural Research has had the continued cooperation and support of the Bureau of Reading Education.

The continued development of the TDN is under the direction of Miss Salter and Mr. Kidder. This Handbook was written by Miss Salter with the technical and editorial assistance of Mr. Kidder and Mr. Hayford.

Carl E. Wedekind
Director, Division of Research

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THE MULTIPLE-CHOICE CLOZE EXERCISES

The Test Development Notebook (TDN) is a collection of 1,725 Multiple-Choice Cloze (MCC) exercises designed to measure literal comprehension--the apprehension of the explicit meaning of written discourse. The exercises are distinct in three ways: They have a common multiple-choice cloze format, they use passages from domains or types of materials that students read, and the passages are graded by difficulty levels.

The Multiple-Choice Cloze Format

The basic MCC format is a passage of 50 to 80 words from which 10 words (nouns, verbs, adjectives, and adverbs) have been systematically deleted; for each deletion, there is an array of five response choices--the deleted word and four grammatically plausible but semantically implausible distractors. This basic format is modified for textual material used in grades 1, 2, and 3; passage length, the number and type of words deleted, the number of words between deletions, and the number of response choices vary as shown in Table 1. The basic MCC format and the three variations are illustrated in Figures 1-4.

The construction of the MCC exercises was governed by a set of rules which prescribed procedures for selecting passages, determining readability levels, applying the MCC format, and selecting distractors from graded word lists.[1]

---

[1] A full description of the development of the MCC Exercises will be available from the Bureau of School and Cultural Research. A list of research reports on the MCC exercises and materials related to the TDN is given in Appendix A.

Table 1

Multiple-Choice Cloze Exercises:
Basic Format and Modifications

	Passage length (words)	Deletions	Response choices	Words deleted	Deletion pattern[a]
Basic Format	49-80	10	5	Nouns Verbs Adjectives Adverbs	Every 5th word
Grade 1[b]	20-40	3	3	Nouns Verbs	Every 8th word
Grade 2[b]	35-50	5	4	Nouns Verbs	Every 8th word
Grade 3[b]	49-80	10	4	Nouns Verbs Adjectives Adverbs	Every 5th word

[a]Because every 5th or 8th word will not be a word that can be deleted, provision is made for modification of the deletion patterns.

[b]Grade refers to the publisher's grade label on textual material.

The MCC format is an adaptation of the standard cloze procedure, in which every fifth word is systematically deleted from a passage of 250 words or more and students are required to fill in the blanks with the exact words deleted. The standard cloze is best known as a means of determining the relative difficulty of written materials or the suitability of particular texts for an individual student; it is also regarded as a measure of student ability to comprehend.

Once upon a time there was a _____ who took such a _____ in the chase, that he _____ no greater pleasure than _____ wild beasts. Early and _____ he camped in the _____ with hawk and _____, and good fortune always _____ his hunting. But it _____ one day that he could _____ no game, although he had tried in every direction since morning.

○	1. base 2. king 3. puzzle 4. freckle 5. trip	○	1. wedding 2. tractor 3. towel 4. forest 5. shore
○	1. stone 2. saw 3. joy 4. cowboy 5. kiss	○	1. cash 2. cream 3. yarn 4. crust 5. hound
○	1. chattered 2. fought 3. tucked 4. knew 5. spun	○	1. pierced 2. followed 3. sorted 4. nibbled 5. startled
○	1. motoring 2. deserting 3. whacking 4. hunting 5. ruining	○	1. appreciated 2. breathed 3. shuffled 4. chanced 5. selected
○	1. late 2. lowly 3. dryly 4. rudely 5. sadly	○	1. shoe 2. index 3. flash 4. arouse 5. design

Figure 1. Basic Multiple-Choice Cloze format.

"Here," said Danny to Kim. "Play with your teddy _____ . I'm going to read my book."

Kim _____ with her teddy bear.

Danny read his _____ .

○ 1. bear	○ 1. guessed	○ 1. tree
2. leg	2. cried	2. book
3. ride	3. played	3. pet

Figure 2. Multiple-Choice Cloze format: Grade 1 text passage.

Mr. White drives his long _____ at night. It is dark as he _____ along the highway. It is still dark when he _____ to a farm in the country. The _____ has vegetables to send to the _____ . Mr. White will take the vegetables to the city.

○
1. squirrel
2. truck
3. dress
4. cup

○
1. drives
2. parades
3. milks
4. waters

○
1. whispers
2. bounces
3. gets
4. falls

○
1. rabbit
2. sign
3. farmer
4. look

○
1. street
2. float
3. cow
4. city

Figure 3. Multiple-Choice Cloze format: Grade 2 text passage.

The men and boys who work on the _____ like to wear bright-colored _____ . Their coats are not like the _____ we wear. They are _____ blankets that have a _____ in the middle so they can be _____ on over the _____ . Then part of the _____ hangs down the _____ and part of it _____ down the front. They call this kind of a coat a sarape.

○	1. farms 2. contents 3. bears 4. thuds	○	1. ordered 2. roasted 3. slipped 4. combed
○	1. tickets 2. pumpkins 3. chickens 4. clothes	○	1. fairy 2. head 3. blizzard 4. party
○	1. tricks 2. coats 3. women 4. races	○	1. animal 2. blanket 3. drink 4. card
○	1. impossible 2. colorful 3. cheeky 4. squeaky	○	1. sailor 2. back 3. cover 4. match
○	1. honk 2. telescope 3. hole 4. dole	○	1. ducks 2. bicycles 3. hangs 4. runs

Figure 4. Multiple-Choice Cloze format: Grade 3 text passage.

As a measure of comprehension, the standard, any-word cloze has a number of advantages over the kinds of comprehension items found on traditional reading tests:

- The cloze procedure is completely objective with no possibility for item-writer bias in test construction.
- There are no questions to impose meaning upon or divert attention from the text, and there are no questions that can be answered without reading the text.
- The task imposed by the cloze is similar to the reading process; that is, in reading the reader always has to construct meaning using the grammatical and semantic clues provided by the written text.

However, the standard cloze also has disadvantages:

- Very few 250-word passages can be used in a single testing period.
- With any-word deletions, undue emphasis may be given to words with largely grammatical functions, such as articles and connectors.
- Synonyms are not recognized as correct.
- Fill-in-the-blank responses must be hand-scored.

The MCC format overcomes these disadvantages because:

- Passage length is limited to a maximum of 80 words.
- Only content words--nouns, verbs, adjectives, and adverbs--are deleted.
- Multiple-Choice distractors are semantically implausible, so there is only one possible correct answer.
- Multiple-choice responses can be machine-scored.

Reading Domains

To ensure that test results would be related to instruction, the passages in the MCC exercises were taken from reading material that students

in elementary and secondary school are expected or required to read. Four domains or types of material are represented in the TDN:

1. The Textual Domain--textbooks in five major content or subject matter areas:

   Reading/Literature
   Language Arts
   Social Studies
   Science
   Mathematics

2. The Citizen Domain--articles and editorials from

   Newspapers and
   News Magazines

3. The Consumer Domain--
   Instructions, Catalogs,
   Advertisements, and so forth

4. The Reference Domain--
   Test Instructions, Encyclopedias,
   Children's Magazines, and so forth

Difficulty Levels

Passage difficulty is a key factor in the TDN because the MCC exercises are intended to determine the level of difficulty at which students literally comprehend written discourse and to trace their progress in literal comprehension by testing their ability over time on passages of increasing difficulty. With a pool of passages graded on difficulty, it is possible to assemble parallel test forms with passages of comparable difficulty or readability and to order the passages on a common difficulty scale.

The difficulty levels of the MCC passages were determined by application of the Spache readability formula to texts for grades 1-3 and the Dale-Chall readability formula to all other materials. Both the Spache and the Dale-Chall formulas use average sentence length and percent of hard or unfamiliar words to compute readability scores. The readability scores

were translated into difficulty levels by dividing the Spache grade score range into 6 equal intervals and the Dale-Chall raw score range into 22 equal intervals. The Dale-Chall raw scores were extrapolated to provide 4 more difficulty levels. The correspondence between the readability scores and the difficulty levels--32 in all--is shown in Table 2.

Difficulty Levels and Grade Levels

Users of the TDN may automatically equate difficulty levels with grade levels, e.g., difficulty level 9 = grade level 9. This is an error to be avoided from the outset, for there is just no correspondence between difficulty levels, which indicate the rank order of clusters of readability scores, and grades. To begin with, the 28 intervals in the readability score range are more numerous than the years of schooling, even with college included. Moreover, to equate a difficulty level--a narrow range of readability scores--or even two such levels with a grade would be unwarranted. Dale and Chall did not do this but related a relatively broad span of their readability scores to two grade levels, e.g., 5.00-5.99 = grades 5-6.

Indeed, the variation in the readability or difficulty of passages from textbooks with the same grade level is even greater than the Dale-Chall score interpretation suggests. Consequently, a collection of MCC passages at a given difficulty level may have been taken from as many as four or five different grade levels. This variability is demonstrated in Table 3, which shows the range of difficulty levels found in passages taken from Reading/Literature textbooks for grades 1 through 10. Similar findings for mathematics are displayed in Table 4. This variation in the difficulty of textual materials, along with the recognized differences in student ability to comprehend, underscores the need for assigning students appropriate instructional materials.

Table 2

Difficulty Levels Based on
Readability Scores

Readability formula	Readability score	Difficulty level
Spache	1.0-1.4	1
	1.5-1.9	2
	2.0-2.4	3
	2.5-2.9	4
	3.0-3.4	5
	3.5-3.9	6
Dale-Chall	4.50-4.74	7
	4.75-4.99	8
	5.00-5.24	9
	5.25-5.49	10
	5.50-5.74	11
	5.75-5.99	12
	6.00-6.24	13
	6.25-6.49	14
	6.50-6.74	15
	6.75-6.99	16
	7.00-7.24	17
	7.25-7.49	18
	7.50-7.74	19
	7.75-7.99	20
	8.00-8.24	21
	8.25-8.49	22
	8.50-8.74	23
	8.75-8.99	24
	9.00-9.24	25
	9.25-9.49	26
	9.50-9.74	27
	9.75-9.99	28
Extrapolation	10.00-10.24	29
	10.25-10.49	30
	10.50-10.74	31
	10.75-10.99	32

Table 3

Distribution by Difficulty Level of Passages from Graded Reading/Literature Texts

Difficulty level	Readability range[a]	Grade level of source									
		1	2	3	4	5	6	7	8	9	10
1	1.0-1.4	13									
2	1.5-1.9	33	7	1							
3	2.0-2.4	9	20	5							
4	2.5-2.9		36	4	2	1	2				
5	3.0-3.4		1	12	2	4		1		1	
6	3.5-3.9			13	6	1	1				
7	4.50-4.74			6	16	7	3	1	2	2	1
8	4.75-4.99			2	13	5	8	5	4	5	2
9	5.00-5.24			2	13	12	10	7	6	1	2
10	5.25-5.49			1	8	9	6	4	3	2	4
11	5.50-5.74			2	7	6	13	2	5	7	2
12	5.75-5.99			1	3	2	6	3	5	5	3
13	6.00-6.24			1	6	2	9	15	2	6	2
14	6.25-6.49				3	2	4	6	2	7	2
15	6.50-6.74					2	1	5	10	4	1
16	6.75-6.99					1	3	5	10	5	1
17	7.00-7.24				1		2	3	7	7	5
18	7.25-7.49					1	1	4	3	12	7
19	7.50-7.74				1			1	2	4	5
20	7.75-7.99								1	7	10
21	8.00-8.24				1		1			2	5
22	8.25-8.49					1			2	2	8
23	8.50-8.74							1		1	
24	8.75-8.99									1	2
25	9.00-9.24										1
26	9.25-9.49										
27	9.50-9.74										1
28	9.75-9.99										
Total		55	64	50	82	56	70	63	64	81	64

[a]Readability scores determined by Spache and Dale-Chall formulas.

Note: Solid lines in columns indicate difficulty ranges of passages actually used in exercises. Not all passages shown here were used.

Table 4

Distribution by Difficulty Level of Passages from Graded Mathematics Texts

Difficulty level	Readability range[a]	Grade level of source							
		3	4	5	6	7	8	9	10
1	1.0-1.4								
2	1.5-1.9								
3	2.0-2.4	1							
4	2.5-2.9	5	3						
5	3.0-3.4	8	1						
6	3.5-3.9	7							
7	4.50-4.74		4						
8	4.75-4.99	2	7		2				
9	5.00-5.24		2	1					
10	5.25-5.49	3		3	1		2	1	
11	5.50-5.74		2	1	3	1			
12	5.75-5.99			5	2		1	2	1
13	6.00-6.24		2	3	4	3	2		1
14	6.25-6.49		2	5	2	3	2		1
15	6.50-6.74		1	1	3	2	3	2	
16	6.75-6.99		1	2	1	3	4	3	2
17	7.00-7.24				2	3	1	3	2
18	7.25-7.49			1	3	1	4		2
19	7.50-7.74			2		1	3	4	
20	7.75-7.99					4	3	4	5
21	8.00-8.24			1	1		3	2	4
22	8.25-8.49					1		4	4
23	8.50-8.74				2	1		2	3
24	8.75-8.99				1		2	1	2
25	9.00-9.24								
26	9.25-9.49				1	1	1	1	3
27	9.50-9.74				2		2		
28	9.75-9.99						1		2
Total		26	25	25	30	24	34	29	32

[a]Readability scores determined by Spache and Dale-Chall formulas.

Note: Solid lines in columns indicate difficulty ranges of passages actually used in exercises. Not all passages shown here were used.

ORGANIZATION OF THE TEST DEVELOPMENT NOTEBOOK

Sections of the TDN

The TDN is divided into nine sections with letter codes as follows:

Section		Code	Exercises
Textual Domain:	Reading/Literature	R	425
Textual Domain:	Language Arts	LA	200
Textual Domain:	Social Studies	SS	260
Textual Domain:	Science	S	200
Textual Domain:	Mathematics	M	200
Citizen Domain:	Newspapers	N	120
Citizen Domain:	News Magazines	NM	120
Consumer Domain		C	100
Reference Domain		Rf	100

Each section has its own cover page followed by a chart showing the number of exercises by level of difficulty. Within each section, the exercises are arranged by difficulty level; exercises at each difficulty level are numbered consecutively from 1 on.

Since the TDN is unbound, the sections may be readily separated and placed in individual ringbinders or file folders. The loose-leaf pages may be assembled in different ways for different test purposes, used as masters for duplication, and then returned to their original position in the Notebook.

Coding of the Exercises

Each exercise carries, in large type, the letter code for the section to which it belongs, the difficulty level of its passage, and a unique

number, e.g., R 1-1, R 1-2, LA 3-1, NM 18-3. The interpretation of such identification codes is demonstrated in Table 5.

Table 5

Interpretation of Identification Codes for MCC Exercises

Code	Section	Difficulty level	Number of exercise
R 1-1	Reading/Literature	1	#1 at level 1
R 1-2	Reading/Literature	1	#2 at level 1
R 2-1	Reading/Literature	2	#1 at level 2
LA 3-1	Language Arts	3	#1 at level 3
SS 7-10	Social Studies	7	#10 at level 7
S 6-5	Science	6	#5 at level 6
M 5-6	Mathematics	5	#6 at level 5
N 13-2	Newspapers	13	#2 at level 13
NM 18-3	News Magazines	18	#3 at level 18
C 11-4	Consumer Domain	11	#4 at level 11
Rf 16-2	Reference Domain	16	#2 at level 16

Each exercise also carries, in small print, a 10-digit supplemental code which repeats and extends the information about the passage. The supplemental code has five distinct units, which indicate:

1. Grade level. In the textual domain, this is the grade level of the passage source, i.e., the publisher's grade label. In the other domains, it is an arbitrary assignment based on difficulty.

2. Difficulty level. Passage difficulty as determined by the Spache or Dale-Chall readability formula.

3. Domain. Type of material from which the passage was taken.

4. Passage category. In the textual domain, this is the content (subject matter) area of the passage source. In the other domains, it is the type of material from which the passage was taken.

5. Passage subcategory. The topic of the passage (textual domain) or the type of article (citizen domain). There are no subcategories for the consumer and reference domains.

The interpretation of a supplemental code is demonstrated in Figure 5.

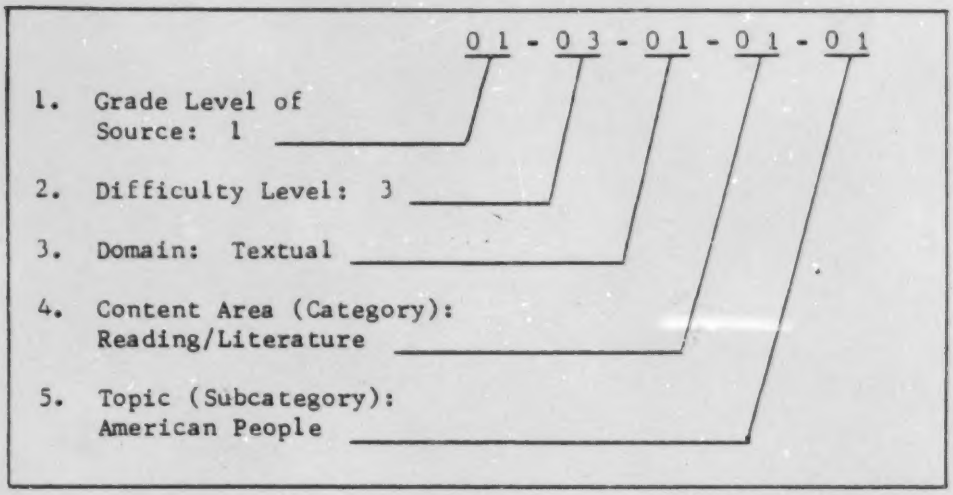
01-03-01-01-01
1. Grade Level of Source: 1
2. Difficulty Level: 3
3. Domain: Textual
4. Content Area (Category): Reading/Literature
5. Topic (Subcategory): American People

Figure 5. Supplemental Code for a Multiple-Choice Cloze Exercise.

The code numbers for the last three units of the supplemental code--for domains, passage categories, and passage subcategories--are shown in Table 6.

The supplemental codes were designed in anticipation of computer storage and retrieval of the TDN. They may be adapted for use as primary identifiers, i.e., as substitutes for the letter-number codes, by the addition of unique numbers. For example, the supplemental code for Exercise R 3-8 (01-03-01-01-01) would become 01-03-01-01-01-008; that for N 23-6 (12-23-02-01-03) would be 12-23-02-01-03-006. (Three places would be provided for the unique number to permit expansion of the number of exercises at a given difficulty level.)

The identification and supplemental codes are demonstrated in the sample MCC formats on pages 3 through 6.

Table 6

MCC Supplemental Codes: Code Numbers for Domains, Categories, and Subcategories

Domain	Code	Category	Code	Subcategory	Code
Textual	01	Reading/ Literature	01	American People	01
				Foreign People	02
				Myth and Legend	03
				Biography	04
				Non-fiction	05
		Language Arts	02	Grammar	01
				Etymology	02
				Composition	03
				Speech	04
				Reference	05
		Social Studies	03	History	01
				Geography	02
				Cultural Studies	03
				Sociology/Civics	04
				Economics	05
				Psychology	06
		Science	04	Physics	01
				Chemistry	02
				Earth Science	03
				Biology	04
				Applied Science	05
		Mathematics	05	Measurement	01
				History and Numeration	02
				Operations	03
				Sets	04
				Geometry	05
				Advanced Algebra	06
				Trigonometry	07
				Graphing	08
				Number Theory	09
				Analytic Geometry	10
				Linear Algebra	11
				Probability	12

Table 6 (Cont.)

Domain	Code	Category	Code	Subcategory	Code
Citizen	02	Newspapers	01	Front Page Stories	01
				Feature Stories	02
				Editorials	03
		News Magazines	02	Editorials/Reviews	01
				Feature Stories	02
				National News	03
				International News	04
Consumer	03	Instructions	01		
		Catalogs	02		
		Advertisements and Packaging Information	03	(No subcategories)	
		Bulletins	04		
		Consumer Magazines	05		
		Contracts, Warranties, Agreements	06		
Reference	04	Test Instructions	01		
		Instructional Magazines	02		
		Encyclopedias	03	(No subcategories)	
		Reference Books	04		
		Children's Magazines	05		

USES OF THE MULTIPLE-CHOICE CLOZE EXERCISES

Suggested uses of the MCC exercises are survey testing, achievement monitoring, and tailored testing. These three types of testing meet different evaluation needs or purposes as shown in Table 7 and as described below. It should be remembered that the MCC exercises are a newly developed evaluation procedure and that they should at present be used in conjunction with other measures and interpreted in the light of other relevant data.

Survey Testing

Survey tests are used to assess the status of a student population with regard to a major educational goal or outcome; they are typified by the achievement testing conducted annually on a district- or state-wide basis. Survey tests usually provide information about groups rather than individuals. They give administrators a broad perspective on pupil performance and school programs and provide data for long-term policy decisions.

The MCC exercises would be used in a survey test to estimate the level of achievement of a student population in the literal comprehension of specified types of reading material. An MCC survey test would incorporate a broad range of exercises relevant to the students to be tested. A survey for the lower elementary grades might concentrate on material from basal readers. At the upper elementary and junior and senior high school levels, a survey might take material from different content areas--language arts, mathematics, science, and social studies--as well as reading and literature and, in addition, might include exercises from the citizen, consumer, and

Table 7

Suggested Uses of Multiple-Choice Cloze Exercises

Type of evaluation	Purpose	Frequency	Decisions	Key decision-makers
Survey testing	Assess literal comprehension level of student population (by district, building, grade, or other unit).	Annual or biannual	Allocate resources on basis of program effectiveness.	Administrators
Achievement monitoring	Assess student growth in literal comprehension.	Periodically (e.g., every 5 or 10 weeks)	Allocate instructional time and effort; select materials for instruction.	Principals, teachers
Tailored testing	Assess literal comprehension level of individual student.	As needed	Assign student to level in instructional program; select materials for student.	Teachers

reference areas. The results from survey tests would be reported as follows:

1. In May, 75% of the third graders in School District A had literal comprehension scores of 80% or better on basal reader passages at difficulty level 7.

2. In May, 60% of the seventh graders in Junior High School B scored 70% or better in literal comprehension of social studies passages at difficulty levels 13 and 14.

3. In May, 55% of the tenth graders in School District A achieved scores of 80% or better on a sampling of newspaper editorials.

An MCC survey test could answer questions about year-to-year changes in pupil performance on literal comprehension, the needs of particular groups of students, and problems that exist with respect to certain kinds of written material. Taken together with readability data on instructional materials, survey test results may indicate the suitability of available instructional resources for the students who are to use them. Such information, along with data from other tests, may be used by administrators to make decisions about the instructional program to be supported, the emphasis of instruction, and the kinds of materials to be purchased.

Achievement Monitoring

Achievement monitoring involves periodic assessment of student performance throughout a semester or school year using a set of parallel test forms. The test forms are randomly distributed so that each student in a class is tested once, but only once, with each test form.

An achievement monitor using the MCC exercises would be designed to determine progress in terms of the level of difficulty at which students demonstrate literal comprehension. Parallel test forms would have passages representing the same difficulty levels. For example, an achievement monitor

for grade 1 students might have five forms with five basal-reader exercises (difficulty levels 1-5) on each. In September, performance would probably be low on even the least difficult exercise, but by mid-year it would improve, and by June a very high proportion of the class would probably score 90% or better on the level 1 and level 2 exercises. The expected progress of a grade 1 class is demonstrated in Figure 6, which shows test results for September, January, and June. Failure of a class to show progress on successive testings would prompt examination of teaching strategies and pupil needs. Monitor results might also be used as a basis for examining the suitability of instructional material available in the classroom.

An achievement monitor could be designed to focus on a particular domain or content area or to assess progress with more than one type of material. The broader the coverage, the longer the test and the testing time needed.

Tailored Testing

Tailored testing is directed to the individual student. A test is assembled and administered to a student to meet an immediate need for a particular kind of information. A tailored test using the MCC exercises could be used to determine the level of difficulty at which a student can literally comprehend written material in one or more content areas or domains. Such a test would be useful with the new student whose reading ability is unknown or with the student whose scores on achievement monitors are erratic. In the case of the new student, a test might be assembled on the basis of his reported grade level, with passages slightly below, at, and above the difficulty level usually passed by students in that grade. Another approach would be to administer a screening test with passages at wide intervals and to follow this with a test made up of passages slightly

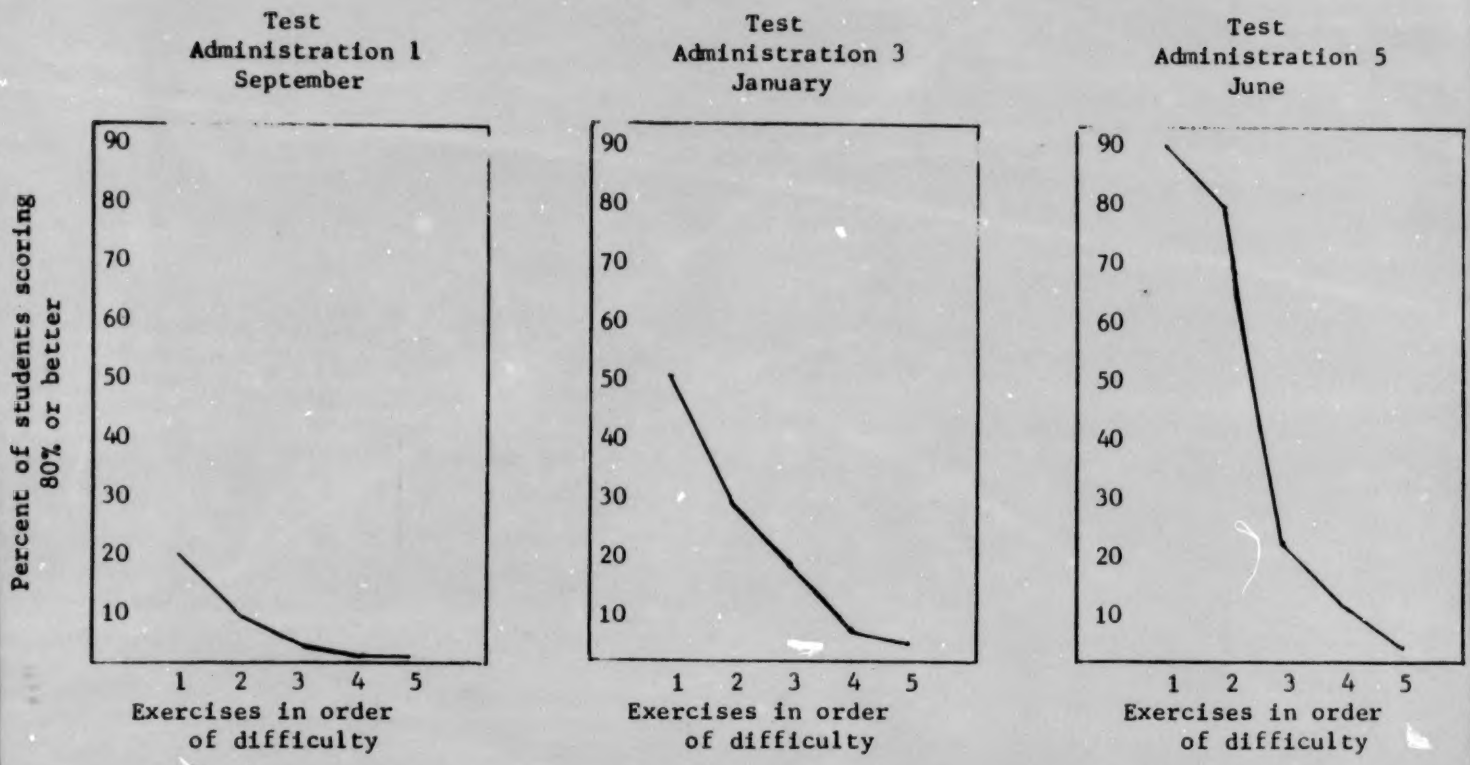

Figure 6. Progress of grade 1 students in literal comprehension as measured by achievement monitor. (Results shown for 3 of 5 monitors.)

below, at, and above the level at which the student had scored 80%.[2] In the case of the student with erratic scores, a test would be prepared with a number of exercises at the levels at which the student had had difficulty on an achievement monitor. For instance, if a grade 1 student had scored only 20% correct on a level 1 exercise, 90% on level 2, and 10% on level 3, the tailored test might have three exercises at level 1, three at level 2, and three at level 3. The results should give a clearer picture of the student's literal comprehension at these difficulty levels.

Determining Use of MCC Exercises

The use made of the MCC exercises will depend on the purpose of testing or, in other words, the questions to which answers are sought. The kinds of questions school administrators and teachers may ask were indicated in the previous discussion of suggested uses of the MCC exercises. Here are additional examples with the needs they express and the type of test they imply:

Question	Need	Type of test
What social studies textbook(s) should be purchased for next year's seventh graders?	To determine difficulty levels at which sixth grade students demonstrate literal comprehension of social studies.	Survey test with social studies material.
Is the eighth grade reading program improving the students' ability to read the newspaper?	To determine if there is change during the year in difficulty levels at which students can literally comprehend newspaper articles.	Achievement monitor in Citizen Domain, Newspapers.

[2] See p. 36 for discussion of scoring.

Question	Purpose	Type of test
Are ninth grade students able to read consumer materials, or should schools offer instruction in this area?	To determine proportion of ninth graders that demonstrate literal comprehension of consumer materials.	Survey test in Consumer Domain.
What textbook would be best for Kim Edwards, who is having trouble with her science course?	To assign student to instructional materials she can comprehend.	Tailored test, science.

TEST DESIGNS

Once the purpose of testing is determined, one must prepare a test design that will serve as a blueprint for test production.

General Test Design

A general design for the construction of both MCC survey tests and achievement monitors is shown in Table 8. This design is both comprehensive and economical, achieving systematic coverage of the TDN with a minimum number of test levels. The general design has

1. Seven test levels covering 28 difficulty levels.

   The seven test levels establish the structure of test forms for students at different stages of development in the ability to literally comprehend written discourse.

2. Systematic increases in the difficulty of test levels.

   a. The first exercise at each test level is three difficulty levels above the first exercise at the preceding test level (i.e., the first exercises in the 7 test levels are at difficulty levels 1, 4, 7, 10, 13, 16, and 19).

   b. Each test level, except level 1, has a range of 10 difficulty levels.

3. Provision for clear-cut distinctions between exercises on test forms.

   a. Exercises will be two difficulty levels apart, except on level 1 forms.

   b. Exercises on forms for a given test level will be at either even-numbered or odd-numbered difficulty levels, e.g., 4, 6, 8, 10, 12, or 5, 7, 9, 11, 13 for test level 2.

Table 8

General Design for MCC Test Construction with Multiple Test Levels and Screening Test

Test form	Test levels						
	1	2	3	4	5	6	7
Difficulty levels	(1) 2 (3) 4 5 6 7 8	4 5 (6) 7 8 9 10 11 12 13	7 8 (9) 10 11 12 13 14 15 16	10 11 (12) 13 14 15 16 17 18 19	13 14 15 16 17 18 19 20 21 22	16 17 (18) 19 20 21 22 23 24 25	19 20 (21) 22 23 (24) 25 26 27 28
Exercises	6	5	5	5	5	5	5
Items	34, 36, or 38	45 or 50	50	50	50	50	50

Key. ◯ Indicates difficulty levels for screening test with nine passages.

〉 Indicates alternate difficulty levels for test forms. Use all odd-numbered or all even-numbered exercises on one form.

4. A built-in design for a screening test. (Difficulty levels 1, 3, 6, 9, 12, 15, 18, 21, and 24 circled in Table 8.)

The screening test --The screening test is included in the general design because there is not yet an established body of data on pupil performance on the MCC exercises that can be used as a guide for placing students in test levels. A student taking the screening test would be assigned to the test level beginning one or two difficulty levels below the highest difficulty level at which he scored 80%[3] or better. For instance, in the following score array, difficulty level 12 was the highest at which the student had 80% correct.

Student Scores on Screening Test

Passage difficulty	1	3	6	9	12	15	18	21	24
Percent correct	100	100	90	80	80	60	30	20	40

This student would be assigned to test level 4, which, as Table 8 shows, would start with difficulty level 10 or 11.

In the general design in Table 8 each difficulty level for the screening test is circled in the column of the test level to which a student would be assigned if the circled difficulty level were the highest on which he scored 80% or better. For instance, difficulty level 12 is circled in test level 4, although it also appears in test levels 2 and 3.

The rules for assigning students to test levels on the basis of screening test scores are summarized in Table 9.

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[3] See p. 36 for discussion of scoring.

Table 9

Test Level Assignments from Screening Test Results
(Nine-Passage Screening Test)

Last passage with 80% correct	Diff. level of passage	Test level assignment	Diff. of first exercise
1	1	1	1
2	3	1	1
3	6	2	4/5
4	9	3	7/8
5	12	4	10/11
6	15	5	13/14
7	18	6	16/17
8	21	7	19/20
9	24	7	19/20

While the general design calls for a nine-passage screening test, with exercises from difficulty level 1 to difficulty level 24, under some circumstances shorter tests may be adequate. For example, the first six passages of the screening test would probably be sufficient for placing primary pupils who could not reasonably be expected to understand the upper level passages. Similarly, the passages at the lower difficulty levels could be omitted for high school students of known ability.

Use of the screening test would be appropriate for both survey testing and achievement monitoring, and for tailored testing as well. However, if large numbers of students are involved (as in survey testing and, in some cases, achievement monitoring), the screening test might be given to a representative student sample in order to determine appropriate test levels for various types of students. With sample screening, it would undoubtedly be necessary to retest some pupils who were completely unsuccessful or had perfect scores at the test level to which they were assigned.

Applications of the general design to sections of the TDN--While the general design for test construction is comprehensive, covering 28 of the 32 difficulty levels of the TDN, no single section of the TDN has passages at all levels. Modifications of the general design appropriate for the various content areas and for the Citizen, Consumer, and Reference Domains are given in Tables 14 through 24 in Appendix B. Modifications are explained in comments on each table. The tables in Appendix B also give the number of exercises available at each difficulty level. It should be apparent from inspection of the tables that the number of available exercises will limit the number of test forms that can be developed, even though exercises may be repeated at different test levels.

Other Test Designs

Other test designs--varying in the range of difficulties covered, the difficulty intervals between exercises, and the number of exercises given--are possible. A general design with five consecutive difficulty levels at each of 12 test levels is shown in Table 10. It might be used as a design for survey testing, achievement monitoring, or tailored testing. The assumption behind this design is that there is a clear distinction between passages at adjacent difficulty levels. Whether or not the difficulty levels can be used with such precision must be determined by experience.

Basic Considerations in Test Design

Three basic considerations in any test design should be the length of the test, the difficulty levels covered, and the number of test forms.

Test length--The length of a test should depend on the time available for testing and the attention span of the students. The youngest students should presumably have the shortest tests, but, at the high school level,

Table 10

Alternate General Design for MCC Test Construction*

Test form	Test levels											
	1	2	3	4	5	6	7	8	9	10	11	12
Difficulty levels	1 2 3 4 5	3 4 5 6 7	5 6 7 8 9	7 8 9 10 11	9 10 11 12 13	11 12 13 14 15	13 14 15 16 17	15 16 17 18 19	17 18 19 20 21	19 20 21 22 23	21 22 23 24 25	23 24 25 26 27 (28)
Exercises	5	5	5	5	5	5	5	5	5	5	5	5 (6)
Items	24, 26, or 28	38 or 40	50	50	50	50	50	50	50	50	50	50 (60)

*Source: Rush-Henrietta Central School. Prepared for Title IV-C Consortium Project, Monroe-Wayne BOCES II.

fixed class periods may limit the time available for testing. Experience has shown that both beginning elementary students and older students can complete five MCC exercises in a 40-minute period after prior training with the MCC. Eight passages are probably the maximum number that should be given at one testing.

The number of MCC items on a test will depend not only on the number of passages included, but also on the grade level of their source. That is, exercises with grade 1 textbook passages have 3 items, those with grade 2 textbook passages 5 items, and all others 10 items. Tests for primary pupils will, therefore, usually have fewer items than those for intermediate and other students. The number of items on tests with passages from grade 3 and above will always be in multiples of 10: 5 passages--50 items, 6 passages--60 items, and so forth.

Difficulty levels--The difficulty levels on an MCC test should start below the level at which students read and extend beyond. This arrangement gives the student an opportunity to experience some success at the beginning of a test and assures that he does not "top out" on the latter part of the test. If a student does achieve success on the most difficult passages, he should be retested at a higher test level. The use of a screening test as suggested in the general design presentation will help to assure that students are assigned to appropriate test levels.

Number of test forms--The number of test forms to be developed with a test design depends on the type of testing being done, the number of students, and the number of exercises available.

In survey testing, multiple test forms are the means for achieving an adequate representation of the material in a reading domain. For a survey test it is better to have 12 different test forms with 12 different

literature passages at difficulty levels 21-22 than to have a single test form with just one literature passage at difficulty level 21. However, an MCC exercise must be administered to at least 100 students to provide a valid estimate of student performance on that passage. Therefore, the number of test forms in a survey test will be determined by the number of students to be tested. With a student body of 800 in a junior high school, for example, the maximum number of test forms would be eight.

In achievement monitoring, the number of test administrations planned for the school year determines the number of test forms. For five test administrations, five forms are needed. Monthly testing would require 10 test forms in order for each student to have a different form at each administration.

With either survey testing or achievement monitoring, the number of test forms to be developed may be influenced by the number of exercises in the TDN. For example, the 425 passages in the Reading/Literature section will allow for many more test forms than will the 100 exercises in the Reference Domain.

Another restricting factor is the number of exercises at particular difficulty levels. As shown in Table 11, the exercises in the various content areas and domains are not distributed equally across the difficulty levels. To produce a set number of test forms, it may sometimes be necessary to repeat the same exercise at different test levels or even on different test forms for the same test level.

Test Specifications

When one has determined a purpose for testing, selected or drawn up a test design, and established the number of forms to be constructed, one

Table 11

Number of Multiple-Choice Cloze Exercises by Difficulty Level of Passage, Domain, and Content Area

Difficulty level	Domain										Grand total
	Textual						Citizen		Consumer	Reference	
	Read./ Lit.	Lang. Arts	Soc. Stud.	Sci.	Math.	Total	Newspapers	News Mags.			
1	10		1			11					11
2	33		10			43					43
3	26	1	14			41					41
4	21	2	24			47					47
5	15	10	25	12	6	68				3	71
6	17	8	8	4	9	46				6	52
7	20	7	7		4	38				5	43
8	17	11	8	3	9	48				3	51
9	29	8	7	3	4	51	1			4	56
10	11	11	14	5	8	49	2			8	59
11	22	9	6	4	8	49	2		5	6	62
12	9	14	10	9	10	52	4		3	6	65
13	19	11	14	9	9	62	2	3	3	6	76
14	11	10	12	11	11	55	4	3	5	7	74
15	22	7	12	6	7	54	3	7	4	4	72
16	20	11	13	13	7	64	2	6	5	4	81
17	25	9	9	18	10	71	10	12	7	5	105
18	27	16	10	11	11	75	6	7	8	4	100
19	12	13	8	5	11	49	7	8	5	6	75
20	16	12	10	11	19	68	13	9	6	7	103
21	10	6	10	10	8	45	13	10	7	3	78
22	11	10	7	11	11	49	7	7	6	4	73
23	6	9	7	9	9	40	10	11	6	5	72
24	4	5	2	11	8	30	8	8	7	3	56
25	7		6	8	6	27	8	10	7	1	53
26	5		3	8	7	23	7	6	6		42
27			3	6	2	11	7	8	5		31
28					6	6	4	5	5		20
29				4		4					4
30											
31				4		4					4
32				5		5					5
Total	425	200	260	200	200	1285	120	120	100	100	1725

has, in effect, established a test specification. A test specification may be formalized as in Figure 7; writing up a test specification in this way has the advantage of consolidating the information needed for test production.

Test Specification

Purpose: To determine levels of difficulty at which students in grades 1-6 in district literally comprehend basal readers.

Test Type: Survey Domain: Textual--Reading/Literature (R)

Test Administration: 1. April Screening test for 5% sample of grade 1-6 students (7 passages; difficulty levels 1, 3, 6, 9, 12, 15, 18).

2. May Survey test for all students.

Grades	Students	Levels	Difficulty range[a]	Forms	Passages	Items
1-6	3,000	1	1-8	6	6	36/45/48
		2	4-13	6	5	45/50
		3	7-16	6	5	50
		4	10-19	6	5	50
		5	13-22	6	5	50

[a]Level 1 Test: difficulty levels 1, 2, 3, 4, 5/6, 7/8. All other test levels: 3 forms with even-numbered difficulty levels, 3 forms with odd-numbered difficulty levels. E.g., level 2 test: difficulty levels 2, 4, 6, 8, 10, 12/3, 5, 7, 9, 11, 13.

Figure 7. Example of a Test Specification. Number of forms determined by expectation of 600 students for each of 5 test levels and desire to have broad sampling from Reading/Literature section.

TEST PRODUCTION, SCORING, AND INTERPRETATION

Test Production

The steps necessary for the production of MCC tests are (1) passage selection, (2) item numbering, (3) preparation of covers and test instructions, (4) duplication of test forms, and (5) preparation of answer keys. Directions for each step are outlined below.

1. Passage Selection

   a. Use the passage identification codes (large-type) to locate desired material.

      If special kinds of material are called for, such as newspaper editorials in the Citizen Domain or test instructions in the Reference Domain, use the supplemental codes as well.

   b. Pull appropriate exercises from the TDN in accord with the test design.

      Exercises should be drawn at random from all those at a given difficulty level in the specified domain or content area. (Permutation tables for use in random selection are given in Appendix C.)

      If difficulty levels are to be pooled or exercises are to be grouped in any special way, this should be done before any passages are drawn.

      If the pool of exercises at a given difficulty level is exhausted before the design requirements are met, reassemble the pool and repeat the process of drawing exercises at random. (Note: In constructing tests, repeat exercises at every other test level, e.g., levels 4 and 6 rather than levels 4 and 5, whenever possible; if an exercise must be repeated at a given test level, administer the alternate forms on which it appears with as wide a time interval as possible.)

   c. Review passages selected to assure that they are suitable for the students who will be taking the test and that there is diversity among the passages on one form, i.e., that they do not all deal with the same topic.

d. Replace any discarded exercises by random sampling from the appropriate level.

2. Item Numbering

a. Arrange the exercises in each test form in order of difficulty as prescribed by the test design.

b. Duplicate one set of each test form for numbering; return unmarked masters to ring binder or file folder for future use.

c. Number the blanks in the passages consecutively from 1 on, i.e., 1 to 36, 1 to 45, or 1 to 50 and so forth, depending on the number of blanks in the entire test.

d. Number the response arrays to correspond with the blanks.

3. Preparation of Test Covers and Instructions

a. For each test form, prepare a cover with a title (e.g., Multiple-Choice Cloze Exercises: Reading/Literature Survey), an identification number (e.g., Level 1, Form 1), and the date of preparation or administration.

b. Write up test administration instructions for the teacher. (See Appendix D for sample instructions.)

4. Duplication of Test Forms

Duplicate the needed quantity of test forms using the pages with item numbers as masters for photocopying.

5. Preparation of Answer Keys

Prepare an answer key for each form using SPPED Form 85, Answer Key for Multiple-Choice Cloze Exercises.

Test Scoring and Interpretation

The scoring unit for an MCC test is the individual passage. As shown in Table 12, a passing score of 80% is recommended for 10- and 5-item passages, 67% for 3-item passages. These standards are based on pupil performance in the validation and calibration studies conducted thus far on the MCC exercises. Since the exercises have undergone some changes since their initial use (e.g., titles eliminated), further experience may modify the scoring standards. Under any circumstances, local users may want to establish their own standards on the basis of local experience.

Table 12

Passing Scores for MCC Exercises

Items on exercise	Items correct	% correct
10	8	80
5	4	80
3	2	67

Group scores on an MCC test would be reported in terms of the proportion of students scoring 80% or better at a particular difficulty level on a test. For example, 40% of the pupils in Smith Jr. High School can read and literally comprehend newspaper articles at difficulty level 12.

An individual score on an MCC test would be the highest difficulty level at which the student had 80% correct responses. The score for Tom Brown, as indicated below, would thus be difficulty level 10.

Student: Tom Brown--Reading/Literature Test, Level 4					
Exercise	1	2	3	4	5
Difficulty	10	12	14	16	18
Score	80%	70%	60%	30%	30%

This difficulty level score would be interpreted by saying, Tom Brown can read and comprehend Reading/Literature passages at or below difficulty level 10. In this interpretation, the assumption is made that the student can read all material at lower difficulty levels. However, a student's scores might fluctuate as shown in the following report for Jane Smith.

Student: Jane Smith--Reading/Literature Test, Level 4					
Exercise	1	2	3	4	5
Difficulty	10	12	14	16	18
Score	90%	60%	80%	40%	20%

Jane Smith's test score would be difficulty level 14, but one would need to administer additional passages at levels 11, 12, 13, and 14 to have a clear understanding of her achievement level. In reporting results for individuals, it should be remembered that more than a single exercise at a difficulty level is necessary for a valid estimate of a student's ability. Assessment of an individual with a one-time survey test would be inappropriate. Similarly, judgments about an individual should be reserved until there have been two or three administrations of an achievement monitor. A tailored test with multiple exercises at given difficulty levels is best for precision in estimating individual student ability.

As suggested elsewhere, MCC test results may be used for the assignment of pupils to instructional materials. Presumably a student literally comprehending reading/literature exercises at difficulty level 10 would be able to literally comprehend reading/literature material with a readability score of 5.49 and below (see Table 2, p. 10). To make this application it is necessary to do readability analyses of textual and other material. SPPED Form 80 provides the Dale-Chall and Spache formulas for this purpose. The efficacy of this application of the MCC score must, at this time, be determined through experience.

Increases over time in the difficulty level at which a student is able to literally comprehend written material are expected. Such changes would

be the result of both instruction and experience. The sensitivity of the MCC exercises in terms of the time intervals during which such change is likely to occur has yet to be determined. More extensive use of MCC exercises with different pupil populations will provide norms for interpreting MCC performance.

In all applications of the Multiple-Choice Cloze exercises, it must be remembered that the focus of the test is literal comprehension. Test results should not be interpreted as indicating the student's ability in inferential comprehension or criticism. Other reading tests will be needed to appraise those skills.

APPENDIX A

SPPED* TEST DEVELOPMENT NOTEBOOK RESOURCE LIST

*System for Pupil and Program Evaluation and Development

RESOURCE LIST FOR TEST DEVELOPMENT NOTEBOOK

The TDN Package

Test Development Notebook: Multiple-Choice Cloze Exercises. Revised 1977.	SPPED Form 81
Answer Key for Multiple-Choice Cloze Exercises. Revised 1977.	SPPED Form 85*
Multiple-Choice Cloze Exercises: Handbook. Revised 1977.	SPPED Form 86
Cloze Training Manual (Lessons for Students). [1976].	SPPED Form 82
Application of the Spache and Dale-Chall Readability Formulas to Written Discourse. [1976].	SPPED Form 80
Distractor Word Lists for Multiple-Choice Cloze Exercises. 1976.	SPPED Form 84

Additional Resources

Documentation: Distractor Generator for Cloze Data (Includes Alpha Lister Program).	SPPED Form 79

Card Decks: Distractor Word Lists; Distractor Generator--Source; Alpha Lister--Source. (Available on loan.)

Research Papers and Reports

Validation of a Multiple-Choice Cloze Test of Literal Comprehension: Summary Report. February 1976. (ERIC--ED 120 165)

Report on the Development and Validation of a System for Measuring Literal Comprehension in a Multiple-Choice Cloze Format. March 1976.

Conventional and Rasch Analyses of an Unconventional Test of Literal Comprehension. April 1976.

Defining and Measuring the Literal Comprehension of Written Discourse. April 1976. (Rationale)

Comparing Rasch Calibration of Passage Reading Difficulty with Spache or Dale-Chall Readability Estimates. April 1977. (ERIC--ED 167 633)

Validity Study: Multiple-Choice Cloze Exercises (Draft). November 1977.

Related Materials

Gorth, W.P., O'Reilly, R.P., and Pinsky, P.D. Comprehensive Achievement Monitoring: A Criterion-Referenced Evaluation System. Englewood Cliffs, N.J.: Educational Technology Publications, 1975. (Available on loan.)

*Separate answer keys available for each of the nine sections of the TDN.

APPENDIX B

TEST DESIGNS

General Design and modifications for

Textual Domain
- Reading/Literature
- Language Arts
- Social Studies
- Science
- Mathematics

Citizen Domain

Consumer Domain

Reference Domain

Table 13

General Design for MCC Test Construction with Multiple Test Levels and Screening Test

Test form	Test levels						
	1	2	3	4	5	6	7
Difficulty levels	(1) 2 (3) 4 5 6 7 8	4 5 (6) 7 8 9 10 11 12 13	7 8 (9) 10 11 12 13 14 15 16	10 11 (12) 13 14 15 16 17 18 19	13 14 (15) 16 17 18 19 20 21 22	16 17 (18) 19 20 21 22 23 24 25	19 20 (21) 22 23 (24) 25 26 27 28
Exercises	6	5	5	5	5	5	5
Items	34, 36, or 38	45 or 50	50	50	50	50	50

Key. ◯ Indicates difficulty levels for screening test with nine passages.

〉 Indicates alternate difficulty levels for test forms. Use all odd-numbered or all even-numbered exercises on one form.

Table 14

MCC Test Design: Reading/Literature
Six Test Levels and Eight-Passage Screening Test

Test form	Test levels						Exercises in TDN
	1	2	3	4	5	6	
Difficulty levels	(1) 2 (3) 4 5 6 7 8	4 5 (6) 7 8 9 10 11 12 13	7 8 (9) 10 11 12 13 14 15 16	10 11 (12) 13 14 15 16 17 18 19	13 14 (15) 16 17 18 19 20 21 22	17 (18) 19 20 (21) 22 23 24 25 26	10 33 26 21 15 17 20 17 29 11 22 9 19 11 22 20 25 27 12 16 10 11 6 4 7 5
Exercises	6	5	5	5	5	5	
Items	34, 36, or 38	45 or 50	50	50	50	50	425 Total

Key. ◯ Indicates difficulty levels for screening test with eight passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

Table 15

MCC Test Design: Language Arts
Five Test Levels and Seven-Passage Screening Test

Test form	Test levels					Exercises in TDN
	1	2	3	4	5	
Difficulty levels	P[3 (4)〉 5 (6)〉 7 8〉 9 10〉 11 12〉 13	7 8〉 (9)〉 10 11〉 12 13〉 14 15〉 16	10 11〉 (12)〉 13 14〉 15 16〉 17 18〉 19	13 14〉 (15)〉 16 17〉 18 19〉 20 21〉 22	15 16〉 17 (18)〉 19 20〉 (21)〉 22 23〉 24	1 2 10 8 7 11 8 11 9 14 11 10 7 11 9 16 13 12 6 10 9 5
Exercises	5	5	5	5	5	200 Total
Items	50	50	50	50	50	

Key. ◯ Indicates difficulty levels for screening test with seven passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

P[Indicates difficulty levels to be pooled for exercise selection.

Table 16

MCC Test Design: Social Studies
Seven Test Levels and Eight-Passage Screening Test

Test form	Test levels							Exercises in TDN
	1	2	3	4	5	6	7	
	P[1							1
	(2)							10
D	3							14
i	(4)	4 〉						24
f	5	5						25
f	6	(6) 〉						8
i	7	7	7 〉					7
c	8 〉	8 〉	8					8
u		9 〉	(9) 〉					7
l		10 〉	10	10 〉				14
t		11	11 〉	11				6
y		12 〉	12	(12) 〉				10
		13	13 〉	13	13 〉			14
			14 〉	14 〉	14			12
l			15 〉	15	(15) 〉			12
e			16	16 〉	16	16 〉		13
v				17 〉	17	17 〉		9
e				18 〉	18 〉	(18) 〉	18 〉	10
l				19	19 〉	19	19 〉	8
s					20 〉	20 〉	20	10
					21 〉	21 〉	(21) 〉	10
					22	22 〉	22	7
						23 〉	23	7
						24 〉	24 〉	2
						25	25 〉	6
							26 〉	3
							27	3
Exercises	6	5	5	5	5	5	5	
Items	29 to 48	38 to 50	50	50	50	50	50	260 Total

Key. ◯ Indicates difficulty levels for screening test with eight passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

P[Indicates difficulty levels to be pooled for exercise selection.

Table 17

MCC Test Design: Science
Seven Test Levels and Eight-Passage Screening Test

Test form	Test levels							Exercises in TDN
	1	2	3	4	5	6	7	
Different levels	(5) 6 (8)* 9 10 11 12 13	8 9 (10) 11 12 13 14 15 16 17	11 12 (13) 14 15 16 17 18 19 20	14 15 (16) 17 18 19 20 21 22 23	17 18 (19) 20 21 22 23 24 25 26	20 21 (22) 23 24 25 26 27 29*	23 24 (25) 26 27 29* 31* 32	12 4 3 3 5 4 9 9 11 6 13 18 11 5 11 10 11 9 11 8 8 6 4 4 5
Exercises	5	5	5	5	5	5	5	200 Total
Items	50	50	50	50	50	50	50	

Key. ◯ Indicates difficulty levels for screening test with eight passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

Note

The science section of the TDN is unique in that there are exercises above difficulty level 28 (i.e., at levels 29, 31, and 32). A range of 28 difficulty levels (5-32) allows 7 test levels as in the general design. For test level 7, passages would be taken from both difficulty levels 27 and 29.

*There are no exercises at difficulty levels 7, 28, or 30.

Table 18

MCC Test Design: Mathematics
Six Test Levels and Eight-Passage Screening Test

Test form	Test levels						Exercises in TDN
	1	2	3	4	5	6	
Difficulty levels	(5) 6 〉 (7) 8 〉 9 〉 10 〉 11 〉 12 〉 13 〉	8 〉 9 〉 (10) 〉 11 〉 12 〉 13 〉 14 〉 15 〉 16 〉 17 〉	11 〉 12 〉 (13) 〉 14 〉 15 〉 16 〉 17 〉 18 〉 19 〉 20 〉	14 〉 15 〉 (16) 〉 17 〉 18 〉 19 〉 20 〉 21 〉 22 〉 23 〉	17 〉 18 〉 (19) 〉 20 〉 21 〉 22 〉 23 〉 24 〉 25 〉 26 〉	19 〉 20 〉 21 〉 (22) 〉 23 〉 24 〉 (25) 〉 26 〉 27 〉 28 〉	6 9 4 9 4 8 8 10 9 11 7 7 10 11 11 19 8 11 9 8 6 7 2 6
Exercises	5	5	5	5	5	5	200 Total
Items	50	50	50	50	50	50	

Key. ◯ Indicates difficulty levels for screening test with eight passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

Table 19

MCC Test Design: Citizen Domain
Four Test Levels and Six-Passage Screening Test

Test form	Test levels				Exercises in TDN	
	1	2	3	4	News-papers	News Magazines
Difficulty Levels	P[9 P[(10) P[11 (12) 13 ⟩ 14 ⟩ 15 ⟩ 16 ⟩ 17 ⟩ 18 ⟩ 19 ⟩	13 ⟩ 14 ⟩ (15) ⟩ 16 ⟩ 17 ⟩ 18 ⟩ 19 ⟩ 20 ⟩ 21 ⟩ 22 ⟩	16 ⟩ 17 ⟩ (18) ⟩ 19 ⟩ 20 ⟩ 21 ⟩ 22 ⟩ 23 ⟩ 24 ⟩ 25 ⟩	19 ⟩ 20 ⟩ (21) ⟩ 22 ⟩ 23 ⟩ (24) ⟩ 25 ⟩ 26 ⟩ 27 ⟩ 28 ⟩	1 2 2 4 2 4 3 2 10 6 7 13 13 7 10 8 8 7 7 4	 3 3 7 6 12 7 8 9 10 7 11 8 10 6 8 5
Exercises	5	5	5	5	120 Total	120 Total
Items	50	50	50	50		

Key. (○) Indicates difficulty levels for screening test with six passages.

⟩ Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

P[Indicates difficulty levels to be pooled for exercise selection.

Comments: Citizen Domain

Difficulty range is 9-28; 13-28 for News Magazines alone.
Test levels parallel test levels 4-7 of general design (Table 13).
A test for News Magazines alone would use test levels 2, 3, and 4. Passages for the screening test would be at difficulty levels 13, 15, 18, 21, and 24.
Difficulty levels 9, 10, and 11 might be pooled for test construction.
The distribution of exercises by type of article and difficulty level is shown in Table 20.

Table 20

Citizen Domain: Newspapers and News Magazines
Distribution of Exercises by Difficulty Level and Type of Article[a]

Difficulty level	Newspapers				News Magazines				
	Front Page Stories	Feature Stories	Editorials	Total	Editorials/ Reviews	Feature Stories	Natl. News	Internatl. News	Total
9		1		1					
10		2		2					
11		2		2					
12		4		4					
13		2		2	1	1		1	3
14		4		4	1	1		1	3
15		3		3	3	3	1		7
16		2		2	2	1	2	1	6
17	4	4	2	10	3	2	3	4	12
18	2	2	2	6	3	1	1	2	7
19	3	1	3	7	1	3	2	2	8
20	3	5	5	13	1	2	4	2	9
21	5	4	4	13	3	3	3	1	10
22	1	4	2	7		2	1	4	7
23	5		5	10	3	3	3	2	11
24	3		5	8	2		3	3	8
25	5		3	8	2	3	3	2	10
26	5		2	7	2	1	1	2	6
27	3		4	7	1	3	2	2	8
28	1		3	4	2	1	1	1	5
Total	40	40	40	120	30	30	30	30	120

[a]For supplemental codes see page 15.

Table 21

MCC Test Design: Consumer Domain
Four Test Levels and Six-Passage Screening Test

Test form	Test levels				Exercises in TDN
	1	2	3	4	
Difficulty levels	(11) 12 (13) 14 15 16 17 18 19	13 14 (15) 16 17 18 19 20 21 22	16 17 (18) 19 20 21 22 23 24 25	19 20 (21) 22 23 (24) 25 26 27 28	5 3 3 5 4 5 7 8 5 6 7 6 6 7 7 6 5 5
Exercises	5	5	5	5	100 Total
Items	50	50	50	50	

Key. ◯ Indicates difficulty levels for screening test with six passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

Comments: Consumer Domain

Difficulty range from 11 to 28 allows 4 test levels.
Test levels parallel levels 4-8 of general design (Table 13), except that test level 1 starts with difficulty level 11, not 10.
Limited number of exercises (100) plus variation in passage sources (e.g., from advertisements to warranties) will limit test construction.
The distribution of exercises by type of material is shown in Table 22.

Table 23

MCC Test Design: Reference Domain
Five Test Levels and Seven-Passage Screening Test

Test form	Test level					Exercises in TDN
	1	2	3	4	5	
Difficulty level	(5) 6 (7) 8 9 10 11 12 13	7 8 (9) 10 11 12 13 14 15	10 11 (12) 13 14 15 16 17 18 19	13 14 (15) 16 17 18 19 20 21 22	16 17 (18) 19 20 (21) 22 23 P[24 25	3 6 5 3 4 8 6 6 6 7 4 4 5 4 6 7 3 4 5 3 1
Exercises	5	5	5	5	5	100 Total
Items	50	50	50	50	50	

Key. ◯ Indicates difficulty levels for screening test with seven passages.

〉 Indicates alternate difficulty levels (all odd-numbered or all even-numbered) for test forms.

P[Indicates difficulty levels to be pooled for exercise selection.

Comments: Reference Domain

Difficulty range from 5 to 25 allows 5 test levels.
Test levels parallel levels 2-6 of general design (Table 13), except that test level 1 starts with difficulty level 5, not 4.
Limited number of exercises (100) plus variation in passage source (e.g., dictionaries vs. children's magazines) will limit test construction.
The distribution of exercises by type of material is shown in Table 24.

Table 24

Reference Domain: Distribution of Exercises by Difficulty Level and Type of Material[a]

Difficulty level	Test Instructions	Instructional Magazines	Encyclopedias	Reference Books	Children's Magazines	Total
5		2			1	3
6	2	1	1	1	1	6
7	1	1	1		2	5
8	1			1	1	3
9	1	1	1		1	4
10	3	1	2	1	1	8
11	1	2	1	1	1	6
12	2	1	1	1	1	6
13	1	1	1	2	1	6
14	1	1	1	1	3	7
15	2		1	1		4
16	1	1	1	1		4
17	1	1	1	1	1	5
18	1	1	1	1		4
19	1	1	2	1	1	6
20	1	2	2	1	1	7
21		1		2		3
22		1	1	1	1	4
23		1	1	1	2	5
24			1	1	1	3
25				1		1
26						
27						
28						
Total	20	20	20	20	20	100

[a]For supplemental codes see page 17.

APPENDIX C

PERMUTATION TABLES

Directions for Use of Permutation Tables

The random selection of MCC exercises for test construction may be readily accomplished by using permutation tables, which provide random distributions of limited sets of numbers, i.e., integers 1-16 as in Table 25 or integers 1-50 as in Table 26. Which of these tables is used will depend on the number of exercises at the difficulty level at which exercises are to be chosen.

The procedures to be followed are:

1. Start with the first block of numerals at the upper-left-hand corner of the permutation table and follow across the rows or down the columns of the block. Make a list, as you come to them, of numerals corresponding to the unique numbers of the available exercises at the relevant difficulty level.* Select numerals enough to equal the number of exercises you need. Then pull the corresponding exercises from the TDN.

   Example: If the test design calls for six exercises at a given level, one each for six test forms, select the first six numerals in the permutation block that correspond to the unique numbers of the available exercises. Remove exercises from Notebook.

2. To select exercises from the next difficulty level, go on to the next permutation block, proceeding systematically through the entire table. (It may be necessary to alternate tables depending on the number of available exercises.)

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*If exercises at two or more difficulty levels are pooled for exercise selection, number the exercises consecutively before starting the selection process. For example, if two difficulty levels are pooled, the lower level containing seven exercises and the higher containing six, number the six exercises at the higher difficulty level so that the pooled exercises are numbered consecutively from 1 through 13.

Table 25

Permutation Table: Integers 1-16

12	2	15	3	9	16	4	10	6	10	12	4	4	3	10	9	14	8	6	2
5	9	1	11	14	15	1	13	11	5	7	16	15	6	11	16	4	11	5	13
10	4	16	8	3	12	7	6	2	8	15	3	5	2	14	12	12	3	9	10
7	6	13	14	8	5	11	2	14	9	13	1	13	1	8	7	15	16	1	7
9	12	3	15	15	4	9	13	12	2	7	3	14	11	12	9	10	15	4	13
1	10	8	16	7	16	6	10	9	15	5	6	5	15	13	6	8	7	14	11
14	6	5	7	5	12	3	1	14	4	8	1	4	3	10	8	9	12	5	3
2	11	13	4	2	11	14	8	16	11	13	10	1	16	2	7	2	1	6	16
7	4	12	14	12	10	7	13	10	8	16	2	2	11	10	13	7	16	3	4
9	15	13	8	4	3	2	14	7	5	12	4	12	3	6	16	12	9	5	14
2	3	5	6	6	8	16	9	14	15	1	13	9	14	7	5	6	11	1	8
16	11	1	10	11	15	5	1	3	11	9	6	4	1	15	8	10	13	15	2
4	10	15	8	13	12	9	2	3	7	8	13	15	11	13	10	15	8	13	4
11	12	7	9	14	7	4	3	15	9	10	2	5	3	4	8	14	1	12	2
6	14	2	5	10	8	1	16	14	6	11	1	1	7	9	14	16	10	5	6
3	1	13	16	5	11	6	15	5	4	16	12	12	6	16	2	3	11	7	9
8	16	3	12	9	11	13	2	3	8	13	6	10	12	16	6	4	11	9	3
1	4	6	13	10	12	7	3	10	16	5	1	7	5	2	11	2	12	5	14
11	14	2	10	16	15	5	14	9	7	4	12	14	1	4	8	15	10	16	6
15	7	9	5	4	8	6	1	15	14	2	11	15	13	3	9	13	7	8	1
10	2	9	12	2	10	5	13	12	10	15	5	2	10	7	5	9	2	15	13
1	6	3	4	11	1	15	14	6	9	3	2	11	9	14	16	6	11	14	1
5	13	16	15	8	16	3	4	16	8	4	7	4	6	13	12	5	16	3	7
14	8	7	11	6	12	9	7	13	11	14	1	8	1	15	3	12	10	4	8
13	2	12	14	3	14	5	12	12	9	11	13	2	7	6	16	2	4	6	8
10	15	8	3	11	4	2	1	16	5	15	1	13	3	9	8	9	15	12	16
16	1	5	6	16	6	10	13	10	4	6	7	1	10	4	12	1	7	11	14
7	4	11	9	8	7	15	9	2	3	14	8	15	5	14	11	3	13	10	5
4	7	5	12	12	13	7	3	11	5	8	3	8	10	16	12	5	2	8	6
6	14	3	16	6	1	9	2	1	13	9	7	2	3	9	14	4	15	10	16
9	2	11	15	14	4	5	10	12	15	10	6	11	4	7	15	7	12	1	14
13	1	10	8	16	15	8	11	16	4	14	2	13	5	6	1	9	3	13	11
12	6	2	15	13	7	14	1	4	7	14	12	2	5	3	10	14	7	5	4
8	7	13	4	10	9	8	12	6	9	8	5	15	7	16	9	8	1	9	11
11	14	3	16	16	11	2	15	3	1	11	15	11	8	12	6	16	12	13	2
9	1	5	10	3	5	4	6	2	10	16	13	4	13	14	1	15	3	10	6
9	3	10	16	8	3	15	7	2	7	16	5	7	5	1	12	9	7	13	1
11	7	1	6	10	5	14	16	10	15	13	8	15	10	2	11	6	16	12	10
15	13	2	8	13	1	4	11	4	11	14	1	3	9	8	13	14	3	15	11
14	4	5	12	9	12	6	2	12	9	6	3	16	4	14	6	4	8	5	2

Table 26

Permutation Table: Integers 1-50

9 24 1 15 16 2 20 49 13 26	18 22 42 4 37 3 38 45 13 33
38 18 45 31 39 14 4 44 41 23	40 32 35 44 24 10 5 49 43 6
8 34 43 29 12 3 40 46 6 19	30 12 28 47 21 7 29 50 48 34
47 11 48 7 21 22 10 30 27 28	23 8 41 15 9 27 1 31 46 2
17 33 42 25 35 32 37 5 50 36	39 14 36 19 16 26 20 17 11 25
1 21 43 41 24 27 42 46 33 13	50 40 36 48 5 30 38 44 31 10
45 23 47 3 11 8 50 28 40 16	26 12 17 16 13 35 34 7 14 28
34 22 38 15 9 36 29 25 39 35	21 25 33 45 27 6 8 46 22 4
18 5 48 44 10 17 19 20 14 37	37 32 15 49 19 43 9 41 47 23
26 31 49 32 2 12 4 7 6 30	3 11 42 2 39 20 29 24 1 18
9 25 10 48 3 21 29 30 27 17	36 24 29 16 3 5 26 48 18 12
2 16 50 5 39 1 37 40 22 47	19 10 22 4 34 35 30 23 39 32
49 26 7 31 35 13 44 15 6 8	38 2 41 50 20 21 42 43 44 45
45 32 4 46 24 18 41 28 11 42	17 15 49 27 1 40 25 31 28 33
36 20 19 23 43 38 12 34 33 14	7 37 14 46 6 11 9 47 8 13
12 43 35 9 47 16 50 14 49 10	10 4 25 1 16 34 27 40 29 46
2 1 13 11 41 40 25 30 45 42	38 7 11 3 5 31 13 2 24 37
31 17 48 34 27 44 36 46 32 39	18 41 8 19 36 21 14 9 50 42
29 7 15 8 18 21 5 33 6 24	6 23 49 20 44 32 33 12 39 48
20 38 26 4 19 22 28 23 3 37	22 15 30 26 43 45 47 28 35 17
33 11 39 15 17 38 36 3 45 43	28 24 31 25 34 21 17 46 41 44
4 10 47 34 5 26 42 1 27 8	23 16 13 20 47 37 42 26 8 11
19 23 31 50 25 9 7 30 28 32	30 38 32 3 12 9 35 4 19 10
22 14 35 2 49 20 18 24 16 41	7 36 43 5 29 2 45 18 39 1
12 13 46 29 37 40 44 6 21 48	33 49 15 48 50 27 6 14 40 22
28 46 31 38 48 1 21 5 25 44	3 27 37 19 31 5 4 44 40 14
8 11 23 13 2 15 47 40 37 16	45 34 42 41 20 39 18 30 25 48
50 17 3 45 19 4 6 10 39 9	11 22 9 38 43 35 10 26 15 8
49 12 43 42 30 24 22 35 36 34	16 7 49 36 28 12 29 6 2 17
18 7 41 20 27 33 29 32 14 26	23 24 21 50 1 13 33 46 32 47
9 46 11 45 35 44 19 34 38 42	10 7 15 1 13 23 31 32 8 2
48 49 33 5 17 10 37 16 24 30	6 46 5 28 9 27 16 26 19 12
15 13 41 14 20 25 2 23 7 27	11 49 14 36 47 41 42 38 20 43
18 4 36 22 26 47 1 12 43 29	34 30 44 37 29 25 35 40 24 33
50 31 39 3 8 6 21 32 28 40	3 45 22 48 18 39 17 50 4 21
28 12 24 3 47 21 14 41 9 4	2 16 26 43 13 18 41 39 44 12
25 15 26 40 5 45 17 2 38 43	47 30 36 6 49 15 46 37 11 5
11 35 49 42 39 1 29 32 30 48	21 34 1 7 14 40 32 24 48 38
7 46 20 13 10 34 44 27 23 8	23 3 20 19 42 50 10 9 31 28
33 6 37 50 19 18 31 36 16 22	45 22 17 4 29 35 33 27 8 25

APPENDIX D

MCC TEST INSTRUCTIONS

This appendix gives two sets of instructions for group administrations of MCC tests, one for grades 1-3 and one for grades 4-6. They are provided as models to be adjusted by users of the TDN in accord with local circumstances and local needs. For example, the instructions for grades 1-3 call for pupils to answer in their test booklets; if a district uses separate machine-scorable answer sheets in testing from grade 1 or grade 2 on, the instructions should be modified accordingly.

In modifying the sample instructions, users should keep in mind that the intent of test instructions is to achieve consistency in test administration and optimum conditions for pupil performance. Three features of the sample instructions which should be incorporated in any directions for MCC test administration, group or individual, are provision for practice, ample time allowance, and pupil motivation.

Provision for practice--Both sets of instructions include practice exercises. Familiarizing pupils with the Multiple-Choice Cloze format and the task the exercises present is essential if the first administrations of the exercises are to yield valid results.

The Cloze Training Manual, SPPED Form 82, may be used to introduce pupils to the Multiple-Choice Cloze before an actual test administration. The Manual gives lesson plans and training exercises for use in grades 1, 2-3, 4-6, and 7-12. The Cloze Training Manual was prepared when TDN passages had titles. The titles should therefore be eliminated from the training passages before they are duplicated for classroom use.

Ample time allowance--The recommended 40-minute testing period should be adequate for the administration of MCC tests of normal length (i.e., 5 or 6 exercises). But the MCC tests are intended to be power tests, not speed tests. Each pupil should have the time needed to finish without undue

pressure. In the planning of any MCC test administration, adequacy of time is a necessary consideration.

Pupil motivation--Motivation is important for optimum pupil performance. To achieve the best results, teachers should administer the MCC tests at a time of day when pupil motivation is high. Teachers should encourage pupils to do the best they can and to do as many of the exercises as they can, recognizing that some exercises will be harder for pupils than others. Clear directions on the mechanics of test taking, checking by the teacher to assure that individuals are following the test directions properly, and the avoidance of disruption during the test administration will contribute to pupil motivation and performance.

MCC TEST INSTRUCTIONS: GRADES 1-3

[These instructions were used for a survey test with six passages that ranged from difficulty level 1 to difficulty level 10. Answers were marked in the test booklets.]

TEACHER INSTRUCTIONS

Pupils to be tested--All pupils enrolled in grades 1-3 who receive regular classroom instruction are to be given the test. Pupils who would find the test extremely frustrating may be excluded from testing.

Preparation for testing--Pupils should be familiar with the Multiple-Choice Cloze before the test administration. You may give them preliminary training using the lessons in the Cloze Training Manual (SPPED Form 82) or by doing the practice exercises in these Test Instructions before the day of the test.

Conditions for testing--The testing should be conducted in your regular classroom under conditions where there is freedom from noise or any other source of disturbance. Make sure that desks are clear, that enough test booklets and sharpened pencils with erasers are available, and that you are thoroughly familiar with the test procedures.

Scheduling and timing--Schedule the test during a part of the day when motivation is likely to be high and when the test period will not be interrupted.

The recommended time for the test is 40 minutes. This should be sufficient for the instructions and completion of the six test exercises. However, the test is intended to be a power test, not a speed test, so pupils should have enough time to consider each item carefully and to finish the test without undue pressure. The testing period may thus be extended within limits reasonable for the pupils taking the test. (Some pupils will finish early and some may reach their limits before the time is up.)

To be sure that your test period will be adequate, time your reading of the instructions for the pupils beforehand.

Motivating pupils--Preparation for the test and the test administration itself should include efforts to motivate optimum pupil performance. Tell the pupils about the test ahead of time. Encourage them to do the best they can and to complete as many exercises as possible.

If, when taking the test, some pupils do not know individual words or are having trouble with particular items, urge them to read on and try others. Do not push them to the point of frustration or blind guessing, and do not pronounce or define words for them.

While pupils are taking the test, circulate through the classroom, checking to make sure that each pupil is marking his answers appropriately and giving individual encouragement as needed, e.g., "Keep on working," or, for some pupils, "Take your time and look at every word."

ADMINISTERING THE TEST: INSTRUCTIONS FOR PUPILS

Materials for testing:

1. Test booklets
2. Sharpened pencils with erasers

Have the pupils clear their desks. When they are ready to begin,

SAY: Today you are going to take the reading test we have been talking about. I am going to give each of you a test booklet and a pencil. Leave the test booklet face up on your desk. Do not open the booklet until I tell you to do so.

When all pupils have their test booklets and pencils,

SAY: Now look at your test booklet and find the line at the top of the page. The word NAME is right before the line. Print your name on the line.

Move around the class, making sure that everyone is printing his name in the right place. Use the chalkboard for illustration as needed.

SAY: Open your test booklet to the first page. Find the capital A at the top of the page. Does everybody see the A? Next to the A is a little story. There is a blank in the story because a word is missing. There is a 1 in the blank and a list of words next to a 1 in a circle under the story. I am going to read the story out loud while you read it to yourself. When we finish, I want you to tell me the word that belongs in the blank.

(Read the story only, not the list of words.)

A

We are going to the farm today. There are animals on the ____1____. We will see the animals.

(1) 1. school
2. boat
3. farm

What word do you think belongs in the blank?

(Pause for response.)

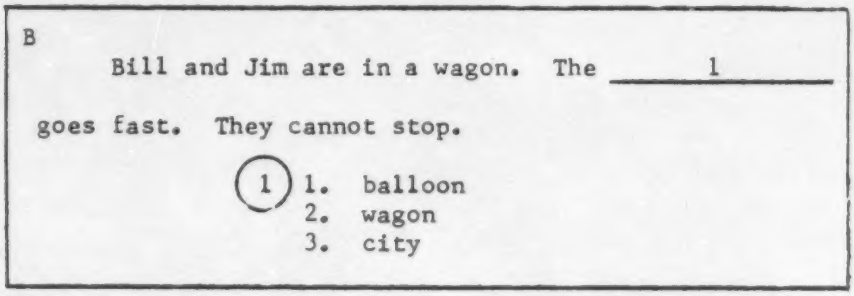
SAY: One of the words in the list under the story is the missing word. Let's see if the word you guessed is in the list. Read the words with me: school, boat, farm. Which word belongs in the story? (Pause for response.) Yes, the missing word is farm. "There are animals on the farm." Farm is the right answer because this story is about going to the farm.

Put a circle around the word farm in the list to show it belongs in the story.

Check to see that pupils circle the word; if needed, demonstrate circling the word on the chalkboard.

SAY: Now find the capital B and look at the story next to it. This story looks like the first one. It has a blank with a 1 in it and a list of words next to a 1 under the story. Read the story to yourself while I read it out loud.

(Read only the story, not the word list.)



When I read the story did you think of a word to go in the blank? The word that belongs in the blank is in the list next to the 1 in the circle.

Let's read the list of words. The words are balloon, wagon, city. Make a circle around the word that belongs in the blank.

(Pause while pupils circle their answers.)

SAY: What word did you circle? (Pause for responses.) Yes, wagon is the word that belongs in the blank. "The wagon goes fast." Wagon is the right answer because this story is about two boys in a wagon.

Now find the capital C and look at the story next to it. This story is longer and has more missing words. There are three blanks in the story and three lists of words below the story.

Read the story silently while I read it out loud.

(Read only the story, not the lists.)

C

"It is raining, Linda," said Debbie. "It is _____1_____ very hard. I wish the rain would _____2_____. I want to ride on my new _____3_____."

(1)	(2)	(3)
1. painting	1. stop	1. picnic
2. raining	2. see	2. day
3. eating	3. bark	3. bike

Now read the story to yourself until you come to blank 1. Then look at the words in list 1. Circle the word that belongs in blank 1.

Move around the classroom, making sure pupils are circling an answer in list 1. You may want to have them put a finger on the 1 in the circle while they do the first item. When everyone has finished,

SAY: What word did you circle? (Pause for response.) Raining is the word that belongs in blank 1. "It is raining very hard." Raining is the right word because this story is about rain.

Now read the rest of the story. When you come to blank 2, circle the word in list 2 that belongs in the blank. Do the same for blank 3. Be sure to match the number of the list--that's the number in the circle next to the list--with the number in the blank.

Pause for pupils to complete the exercise and check to see that they are matching the blanks and word lists properly. When everyone is finished,

SAY: What word did you circle in list 2? (Pause for response.) Yes, the answer is stop. "I wish the rain would stop."

What word did you circle in list 3? (Pause for response.) The answer is bike. "I want to ride on my new bike."

Now, I'll read the whole story with the words that belong in the blanks. Listen and see how it all fits together. " 'It is raining, Linda,' said Debbie. 'It is raining very hard. I wish the rain would stop. I want to ride on my new bike.' "

In your test booklet are more stories like the one we just did. Some have three blanks and some have more. There are no letters by the stories, just numbers in the blanks. You are t. read each story and circle the words below the story that belong in the blanks. Be sure you match the number of the blank with the number of the list where you mark your answer. Remember, the number of the list has a circle around it.

Try to read each story all the way through before you start circling your answers. If you cannot find a word for one blank go on to the next and come back to it. If you change your mind about an answer, erase your first circle and make another. There is only one right word for each blank.

Take your time. It is more important to work carefully than quickly. When you finish, raise your hand and I will collect your test booklet. Does everyone know what to do?

(Pause for questions.)

SAY: Now turn to page 3 and begin. Read carefully and do the best you can.

During the test, check periodically to see that every pupil is matching numbers and circling answers properly. Encourage pupils to keep working and answer all items, but do not read or define words for them.

End the test administration when all pupils have had time to complete the test or to do as much of it as they can. (The test is designed to cover a wide range of pupil abilities; exercises at the end will be too difficult for many pupils.) Let pupils who finish read at their desks.

Note: The practice exercises in these instructions are shown on the following page as they appeared in the test booklet. The page may be duplicated for local use.

A We are going to the farm today. There are animals on the ____1____. We will see the animals.

(1) 1. school
2. boat
3. farm

B Bill and Jim are in a wagon. The ____1____ goes fast. They cannot stop.

(1) 1. balloon
2. wagon
3. city

C "It is raining, Linda," said Debbie. "It is ____1____ very hard. I wish the rain would ____2____. I want to ride on my new ____3____."

(1)	(2)	(3)
1. painting	1. stop	1. picnic
2. raining	2. see	2. day
3. eating	3. bark	3. bike

MCC TEST INSTRUCTIONS: GRADES 4-6

[These instructions were prepared for a survey test with six passages ranging from difficulty level 5 to difficulty level 16. They call for machine-scorable answer sheets marked in advance with student names and code numbers.]

TEACHER INSTRUCTIONS

Students to be tested--All students enrolled in grades 4-6 who receive regular classroom instruction are to be given the test. Students who would find the test extremely frustrating may be excluded from the testing.

Preparation for testing--Students should be familiar with the Multiple-Choice Cloze before the test administration. You may give them preliminary training using the lessons in the Cloze Training Manual (SPPED Form 82) or by doing the practice exercise in these Test Instructions before the day of the test.

Conditions for testing--The testing should be conducted in your regular classroom under conditions where there is freedom from noise or any other source of disturbance. Make sure that desks are clear; that an adequate supply of test booklets, answer sheets, and number 2 pencils with erasers is available; and that you are thoroughly familiar with procedures.

Scheduling and timing--If possible, schedule the test during a part of the day when motivation is likely to be high and when the test period will not be interrupted.

The recommended time for the test is 40 minutes. This should be sufficient for the instructions and completion of the six test exercises. To be sure that your test period will be adequate, time your reading of the instructions for the students beforehand.

The test is intended to be a power test, not a speed test, so students should have enough time to consider each item carefully and to finish the test without undue pressure. The testing period may thus be extended within limits reasonable for the students taking the test. (Some students will finish early, and some may reach their limits before the time is up.)

Motivating students--Preparation for the test and the test administration itself should include efforts to motivate optimum student performance. During testing students should be encouraged to do the best they can and to complete as many exercises as possible.

If some students do not know individual words or are having trouble with particular items, urge them to read on and try others. Do not push them to the point of frustration or blind guessing, and do not pronounce or define words for them.

While students are taking the test, circulate through the classroom, checking to make sure that each student is marking his answers appropriately and giving individual encouragement as needed, e.g., "Keep on working," or, for some students, "Take your time and look at every word."

ADMINISTERING THE TEST: INSTRUCTIONS FOR STUDENTS

Materials for testing:

1. Test booklets
2. Answer sheets
3. Sharpened number 2 pencils with erasers

Have the students clear their desks. When they are ready to begin,

SAY: Today you are going to take the reading test we have been talking about. I am going to give each of you an answer sheet with your name in the upper left hand corner, a test booklet, and a pencil. Leave the test booklet face up on your desk. Do not open the booklet until I tell you to do so.

After the answer sheets, booklets, and pencils have been distributed,

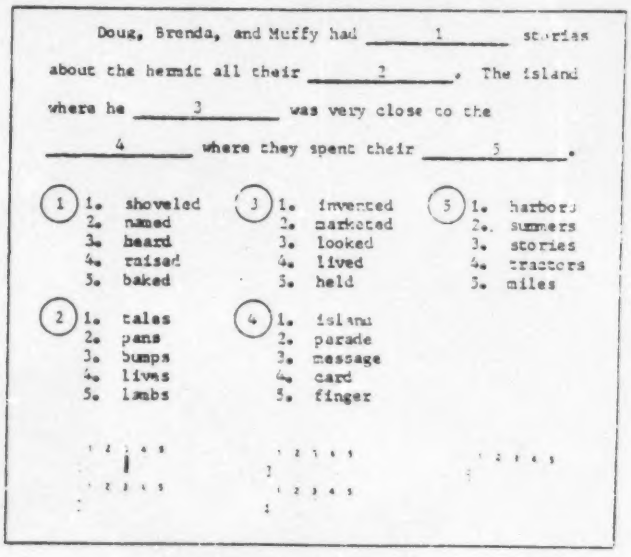
SAY: Check the answer sheet to be sure that it has your name on it. Does everyone have an answer sheet with his name?

When students have checked their answer sheets,

SAY: Now open your test booklet to page 1 and look at the sample exercise. In the paragraph at the top of the page are five numbered blanks for five missing words. Below the paragraph are five lists of words numbered to match the blanks. At the bottom of the page are spaces for marking answer sthe way you will mark your answer sheet.

Read the paragraph to yourself. Read the whole paragraph, and then we will look at the blanks and word lists together.

(Pause while students read. Note: In test booklet word lists are arranged in a single column.)



Doug, Brenda, and Muffy had ___1___ stories about the hermit all their ___2___. The island where he ___3___ was very close to the ___4___ where they spent their ___5___.

(1) 1. shoveled 2. named 3. heard 4. raised 5. baked

(2) 1. tales 2. pans 3. bumps 4. lives 5. lambs

(3) 1. invented 2. marketed 3. looked 4. lived 5. held

(4) 1. island 2. parade 3. message 4. card 5. finger

(5) 1. harbors 2. summers 3. stories 4. tractors 5. miles

When students have read the paragraph,

SAY: Now let's go back to the beginning. "Doug, Brenda, and Muffy had _____ stories. . . ." Look at the first word list and tell me the word that belongs in blank 1. (Pause for response.)

Yes, heard is the word that belongs in the blank. It is the word that makes sense. "Doug, Brenda, and Muffy had heard stories. . . ." Now look at the spaces for answers at the bottom of the page. Next to the 1 are five spaces, numbered 1 to 5. Space number 3 is filled in because heard is the third word in list 1. This is the way to mark your answer. Blacken the space under the number of the word you choose.

Now read all of the first sentence. When you come to blank 2, find the word in list 2 that belongs in the blank. Mark your answer next to the 2 at the bottom of the page; blacken the space under the number of your answer.

(Pause while students read and mark answer.)

What word in list 2 belongs in blank 2? (Pause for response.)

Yes, the word for blank 2 is lives. "Doug, Brenda, and Muffy had heard stories about the hermit all their lives." Lives is the word that makes sense in the blank.

What number space did you blacken for answer 2. (Pause for response.)

Yes, 4 is right. You should have made a black mark under the 4 on the second answer line because lives is the fourth word in list 2.

Now read the rest of the paragraph and do blanks 3, 4, and 5 as you come to them.

While students finish the sample exercise, move around the classroom, checking to see that they are matching the blanks and the word lists, and that they are marking answers on the corresponding answer lines. Also be sure that they are adequately blackening the answer spaces. When the students have finished,

SAY: Now we'll go over the answers. What word belongs in blank 3? (Pause for response.) Yes, the word is lived. It is word 4 in the third list, so you should have blackened the space under the number 4 for answer 3. Did everybody choose the word lived?

What word belongs in blank 4? (Pause for response.) Yes, the word is island. It is the first word in list 4, so you

should have blackened the space under the number 1 for answer 4. Did everybody choose the word island?

What word belongs in blank 5? (Pause for response.) Yes, the word is summers. It is word 2 in list 5, so you should have blackened the space under the number 2 for answer 5. Did everybody choose the word summers?

The right answers, then, are 3, 4, 4, 1, 2, and the words that belong in the paragraph are heard, lives, lived, island, summers. With these words in the blanks, the paragraph reads "Doug, Brenda, and Muffy had heard stories about the hermit all their lives. The island where he lived was very close to the island where they spent their summers." Do you see how it all fits together and makes sense?

In your test booklet are exercises like the one we just did, only longer. There will be 10 blanks with 10 word lists in each exercise. You are to read the paragraphs, find the words that belong in the blanks, and mark your answers on your answer sheet.

Try to read the paragraphs in each exercise all the way through before you start looking for the answers. If you cannot find a word for one blank go on to the next and come back. If you change your mind about an answer, erase your answer sheet carefully. Be sure the number by the list where you look for your answer is the same as the number in the blank, and that you mark your answer on the right line of your answer sheet.

Take your time. It is more important to work carefully than quickly. When you finish, raise your hand and I will collect your test booklet. Does everyone know what to do?

(Pause for questions.)

SAY: Now turn to page 2 and begin. Read carefully and do the best you can.

During the test, check periodically to see that every student is matching numbers and marking answers properly. Encourage students to keep working and answer all items, but do not read or define words for them.

End the test administration when all students have had time to complete the test or to do as much of it as they can. (The test is designed to cover a wide range of pupil abilities; exercises at the end will be too difficult for some students.) Let students who finish read or do homework at their desks.

Note: The practice exercise in these instructions is shown on the following page as it would appear in the student's test booklet. The page may be duplicated for local use. It may be used for grades 7-12 as well as grades 4-6.

Doug, Brenda, and Muffy had ___1___ stories about the hermit all their ___2___ . The island where he ___3___ was very close to the ___4___ where they spent their ___5___ .

(1)
1. shoveled
2. named
3. heard
4. raised
5. baked

(2)
1. tales
2. pans
3. bumps
4. lives
5. lambs

(3)
1. invented
2. marketed
3. looked
4. lived
5. held

(4)
1. island
2. parade
3. message
4. card
5. finger

(5)
1. harbors
2. summers
3. stories
4. tractors
5. miles